

REMARKS

Claims 11 and 12 stand rejected under 35 U.S.C. §112, second paragraph. These claims have been amended in a readily apparent manner to overcome the rejection. Withdrawal is respectfully requested.

Claims 1-3, 5, 7, 9-14, 16, 18 and 20-22 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Nguyen et al. Applicant respectfully traverses this rejection with respect to independent claims 1, 9, 11, 12, 20 and 22, and their respective dependent claims, because the cited reference does not disclose (or suggest) the installation location of the air adjusting means. The rejection is traversed with respect to independent claims 7 and 18, and their respective dependent claims, because the cited reference does not disclose (or suggest) adjusting the volume of the air for cooling by dividing between air leading to the first exhaust means and the second exhaust means, as in the present invention.

The Nguyen et al. reference relates to an airflow system for a telecommunications equipment assembly used for housing electronic devices. As shown in Figs. 4A and 5A, for example, the device of Nguyen et al. includes a divider mechanism 88 for separating a card cage section 82 into two channels 84 and 86. An intake fan tray 92 allows air to enter the channel 84 through an intake opening 96, and an exhaust fan tray 94 allows air from channel 86 to be expelled through an exhaust opening 98. A plenum 90 connects the two channels 84 and 86, so that the air flows therethrough, as shown by the arrow 125 in Fig. 5A. The divider mechanism 88 is “intended to direct the majority of air through the channels thus created” (col. 5, lines 18-20).

As shown in Figs. 6 and 13, for example, the claimed air adjusting means 126 of the present invention is installed in either or both of a first boundary part 124, where the substrate housing part 106 and the downstream side duct 116 contact each other, or a second boundary part 127, where the substrate housing part 106 and the upstream duct contact each other. In this manner, the cooling air is adjusted to a volume of air corresponding to the substrate units installed in the substrate housing part.

As described above, the divider mechanism 88 of Nguyen et al. divides the card cage section 82 into two separate channels (see Fig. 5A). The divider mechanism is not installed at the boundary between the substrate housing part (which could be the card cage section 82 in Nguyen) and the downstream side duct or the upstream side duct (which could be the exhaust opening 98 or the intake opening 96). The differences between the locations of the claimed air adjusting means and that of the divider mechanism of Nguyen et al. can be clearly seen when Fig. 5A of Nguyen et al. is compared with Fig. 13 of the subject application. For this reason, independent claims 1, 9, 11, 12, 20 and 22, and their respective dependent claims, are allowable over Nguyen et al.

In the present invention, a volume of air is adjusted by dividing between air leading to the first exhaust means through a downstream side duct and air leading to the second exhaust means through a housing unit in the downstream side duct (best shown in Fig. 13). As shown in Figs. 1-3 of the Nguyen et al. reference, the fan trays 106, 108 and 110 include intake fans 73a for drawing air into the intake opening 96, and exhaust fans 73b for expelling air out through the exhaust opening 98. While the reference shows that the exhaust

fans are provided in three separate trays, it does not disclose (or suggest) any manner of dividing the air between the first and second exhaust means, as in the present invention. Moreover, the reference also does not disclose (or suggest) that the volume of air is divided by using a separate housing unit installed in the downstream side duct (shown in Fig. 13 by reference numeral 132). For at least these reasons, independent claims 7 and 18, and their respective dependent claims, are allowable over Nguyen et al.

Claims 4, 6, 8, 15, 17 and 19 stand rejected as being unpatentable over Nguyen et al. in view of a number of secondary references. Applicant traverses these rejections for the reason given with respect to their respective independent claims, and for the additional features recited in these dependent claims.

For all of the above reasons, Applicants request reconsideration and allowance of the claimed invention. The Examiner should contact Applicants' undersigned attorney if a telephone conference would expedite prosecution.

Respectfully submitted,

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February 3, 2006

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